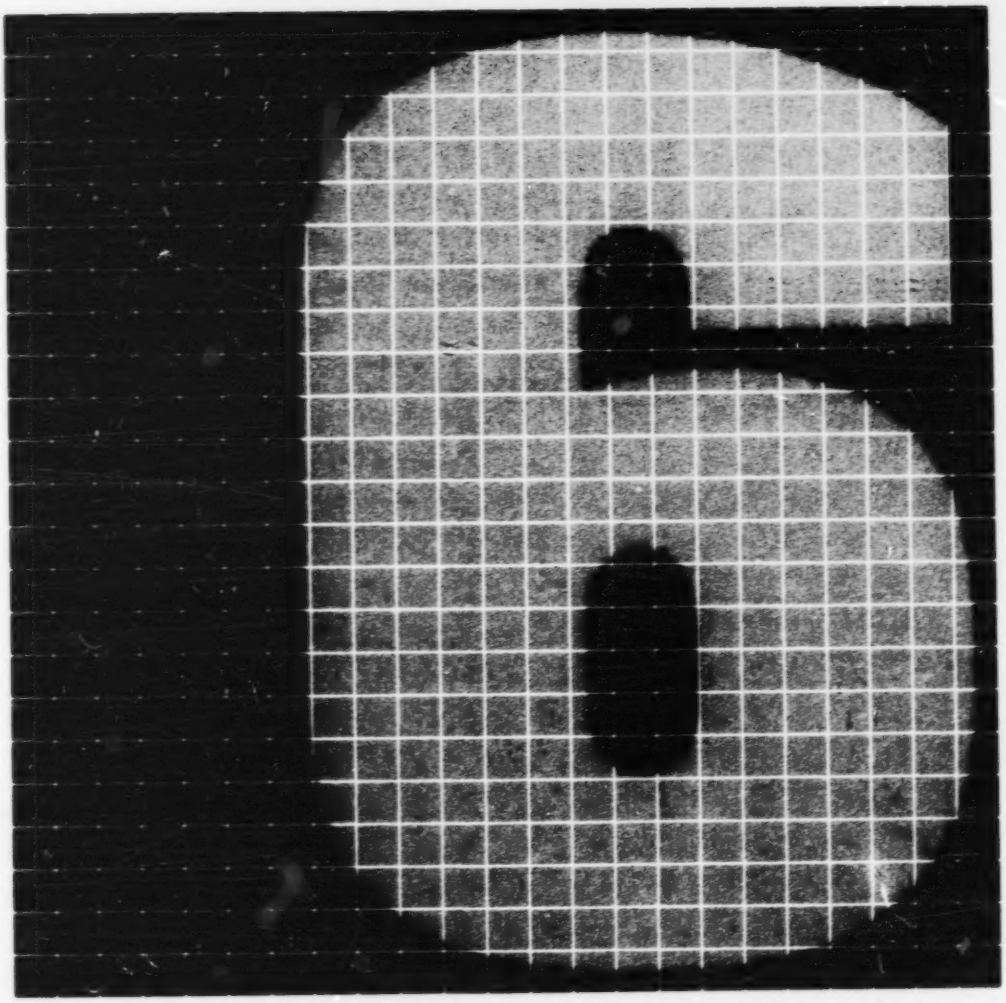
# Blueprint for Waste Management in Ontario

# Appendix 6

## Proposed Revisions to Regulation 309



Ontario

Ministry of the Environment

Hon. Keith C. Norton, Q.C., Minister

Gérard J. M. Raymond, Deputy Minister

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This is one of 11 appendices to the Blueprint for Waste Management. A complete list is presented on the inside of the back cover.

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# APPENDIX 6
# PROPOSED REVISIONS TO REGULATION 309

Since the Waste Management Act was passed in 1970, there have been many advances in technology and practices which have resulted in changes in Regulation 309, the general regulation dealing with waste management.

This Appendix incorporates all of the changes made to date and outlines, for discussion, further revisions and additions that may be required to implement program changes resulting from the Blueprint.

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## APPENDIX 6

## PROPOSED REVISIONS TO REGULATION 309

### INTRODUCTION

Regulation 309, the general waste management regulation, is the primary control document for waste management in Ontario. As such, it must incorporate definitions, standards, and requirements to enable the Ministry to carry out its programs and ensure that waste management in Ontario is carried out in an environmentally safe manner.

This Appendix outlines possible changes to the existing Regulation 309 which may be required if certain aspects of the Blueprint are adopted. Additional changes to the existing sections are also suggested as a means of improving the clarity of the regulation and its intended effect.

The reader should note that detailed guidelines, procedures and standards would be developed to expand, clarify and generally assist in the application of the revised regulation if adopted. The reader should also note that certain schedules relating to hazardous waste will form a part of this Regulation. Current drafts of these schedules appear in Appendix 4.

## DEFINITIONS

Because of possible changes in the regulation resulting from the Blueprint, and also to clarify certain existing definitions, the following definitions are presented here for discussion.

It is noted that the Blueprint proposes the classification of wastes into three general categories: special waste, controlled waste and municipal waste.

The special waste category would include liquid and solid hazardous wastes and most liquid industrial wastes. These types of wastes are defined in this section.

The controlled waste category would include site-specific solid waste and certain non-hazardous liquid wastes. These are also defined in this section.

The municipal waste category includes wastes from residential, commercial, institutional and industrial sources composed of material similar to normal household waste. Municipal waste is defined in this section.

**Proposal for Discussion**

i) "a site" means,
a) the geographical contiguous property or properties owned by the same generator which may be divided by public or private right-of-way, provided the entrance and the exit between the properties is at cross-roads intersections, and access is by crossing, as opposed to going along, the right-of-way, or
b) non-contiguous properties owned by the same generator but connected by a right-of-way which the owner controls and to which the public does not have access

ii) "access road" means a road that leads from a public road to a waste receiving facility

iii) "agricultural waste" means waste that results from farm

operations and which is disposed of in accordance with normal farming practices

iv) "asbestos waste" means solid or liquid waste that contains asbestos in more than a trivial amount or proportion and that does not contain a significant amount or proportion of other components that would bring the waste within the meaning of hazardous waste

v) "backfilling waste" means non-putrescible waste other than hazardous waste, site-specific waste, or liquid industrial waste that can be shown to produce a leachate containing contaminant concentrations less than the concentrations listed in Schedule 5 (Appendix 4 to the Blueprint)

vi) "backfilling site" means a site where backfilling waste is used to replace soils (earth) as fill material for construction operations such as road building and the raising of building lots

vii) "carrier" means any person or corporation, who, by virtue of ownership, management, control or operation is engaged in the transportation of waste

viii) "cell" means a deposit of waste that has been covered by cover material so that no waste deposited is directly exposed to the atmosphere

ix) "commercial waste" means waste, other than hazardous waste, site-specific waste, or liquid industrial waste that is generated from commercial establishments, and includes asbestos waste

x) "commercial chemical waste" means a waste which is a commercial chemical product or manufacturing chemical intermediate of a specified generic name and includes:

a) a commercial chemical product or manufacturing chemical intermediate which is off-specification and which, if it met specifications, would have the specified generic name; or

b) residues of contaminated material from the clean-up of a

spill of a commercial chemical product or manufacturing chemical intermediate of the specified generic name or a commercial chemical product or manufacturing chemical intermediate which is off-specification and which, if it met specifications, would have the specified generic name; or

c) an empty container or liner from an empty container that was previously used to contain a commercial chemical product or manufacturing chemical intermediate of the specified generic name, or commercial chemical product or manufacturing chemical intermediate which is off-specification and which, if it met specifications, would have the specified generic name, or residue or contaminated materials from the clean-up of a spill of any of them, unless the empty container or the liner from the empty container has been triple rinsed,

but, except as specified in clause (a),(b), or (c), does not include a waste stream or waste material in which material of the specified generic name is present

xi) "cover material" means soil or other material approved for use for covering waste in a landfilling site

xii) "domestic waste" means waste that is generated from households

xiii) "dust suppressant" means waste which appears in the following list and that is used for dust suppression:

a) calcium chloride from the production of sodium carbonate using the Solvay process;

b) pulping liquor from one of the following processes:

i) sulphite process using sodium, calcium or magnesium;

ii) neutral sulphite semi-chemical process;

iii) non-sulphur semi-chemical process;

c) brine from oil and gas well production;

d) fluids, other than coolant, diesel fuel or gasoline from the servicing of motor vehicles.

xiv) "empty container" means a container from which all wastes or other materials have been removed using the removal practices commonly used for the specific material, such as pumping or

pouring, and which contains less than 2.5 cm of material on the bottom of the container

xv) "enclosed transfer station" ("transfer station") means any building or structure where waste is temporarily deposited, and no processing or treatment is carried out, prior to its removal to a waste disposal site or treatment facility

xvi) "generator" means any person or corporation, by site, who, by virtue of ownership, management, operation or control, causes or allows to be caused the creation or storage of waste

xvii) "hauled sewage" means waste removed from sewage systems regulated under Part VII of the Act including cesspools, septic tank systems, privy vaults, privy pits, chemical toilets, portable toilets and holding tanks

xviii) "hazardous waste" means:

a) "acute hazardous waste chemical"
b) "corrosive waste"
c) "hazardous industrial waste"
d) "hazardous waste chemical"
e) "ignitable waste"
f) "pathological waste"
g) "reactive waste"
h) "severely toxic waste"

but does not include the exclusions from hazardous waste listed below.

Definitions of terminology used in the hazardous waste definition are provided here for convenience of reference.

"acute hazardous waste chemical" means a commercial chemical waste having a generic name listed in Schedule 2, Part A (Appendix 4 of the Blueprint) unless a declaration is made pursuant to Section 5 (following the definitions) that the waste is not an "acute hazardous waste chemical";

"corrosive waste" means waste that has either of the following properties

a) it is aqueous and has a pH less than or equal to 2 or greater than or equal to 12.5 as determined by a pH meter using either the test method specified in the "Test Method for the Evaluation of Hazardous Waste" or an equivalent test method approved by the Ministry, or

b) it is a liquid and corrodes steel (SAE 1020) at a rate greater than 6.35 mm per year at a test temperature of 55°C using test NACE TM-01-69 or an equivalent test method approved by the Ministry.

"hazardous industrial waste" means the generic or specified waste listed in Schedule 1 (Appendix 4 of the Blueprint) unless a declaration is made pursuant to Section 5 (following the definitions) that the waste is not a "hazardous industrial waste";

"hazardous waste chemical" means a commercial chemical waste having a generic name listed in Schedule 2, Part B (Appendix 4 of the Blueprint) unless a declaration is made pursuant to Section 5 (following the definitions) that the waste is not a "Hazardous Waste Chemical";

"ignitable waste" means a waste that has any one of the following properties

a) it is a liquid, other than an aqueous solution containing less than 24% alcohol by volume, and has a flash point less than 61°C, as determined by the TAG Closed Cup Tester (ASTM D-56-79), the Setaflash Closed Cup Tester (ASTM D-3243-77 or ASTM D-3278-78), Pensky-Martens Closed Cup Tester (ASTM D-93-79), or as determined by an equivalent test method approved by the Ministry,

b) it is a solid and is capable, under standard temperature and pressure, of causing fire through friction, absorption of moisture or spontaneous chemical change and, when ignited, burns so vigorously and persistently that it creates a hazard,

c) it is an ignitable compressed gas (class 2) as defined by

the Ontario Dangerous Goods Transportation Act, 1980, or

d) it is an oxidizing substance (class 5) as defined by the above said Act

"pathological waste" means waste that is any of the following:

a) human anatomical waste including any part of the human body but excluding non-infectious extracted teeth, hair, nail clippings, and the like

b) animal anatomical waste which is all or any part of the carcass suspected by a licensed veterinary practitioner to be infected with communicable disease

c) all non-anatomical waste infected with a communicable disease from any source including public and commercial laboratories and hospitals

"reactive waste" means a waste that has any of the following properties:

a) it is normally unstable and readily undergoes violent change without detonating

b) it reacts violently with water

c) it forms a potentially explosive mixture with water

d) when mixed with water, it generates toxic gases, vapours or fumes in a quantity sufficient to present danger to human health or the environment

e) it is a cyanide or sulphide bearing waste which, being exposed to pH conditions between 2 and 12.5, can generate toxic gases, vapours, or fumes in a quantity sufficient to present danger to human health or to the environment

f) it is capable of detonating or explosive reaction if it is subjected to a strong initiating source or if heated under confinement

g) it is readily capable of detonating or explosive decomposition or reacting at standard temperature and pressure

h) it is defined as a Class 1 explosive in the Ontario Dangerous Goods Transportation Act, 1980

"severely toxic waste" means a waste that contains a contaminant listed in Schedule 3 (Appendix 4 to the Blueprint) at a

concentration greater than one part per million

Exclusions from hazardous waste:

a) waste from the operation of a sewage system subject to the provisions of Part VII of the Act or the operation of a holding tank to which regulations made under clause (a) or (b) of subsection 3 of the section 136 of the Act apply;

b) waste from the operation of a sewage works subject to the Ontario Water Resources Act where the principal wastes entering the works are from human origin;

c) domestic waste;

d) waste that is hazardous industrial waste, hazardous waste chemical, ignitable waste, corrosive waste or reactive waste and that is produced or generated in a given month or otherwise accumulated by a generator in an amount less than 5 kilogram (kg) per month;

e) waste that is an acute hazardous waste chemical and that is produced or generated in a given month or otherwise accumulated by a generator in an amount less than 1 kg;

f) an empty container or the liner from an empty container that contains hazardous industrial waste, hazardous waste chemical, ignitable waste, corrosive waste or reactive waste;

g) an empty liner of less than 20 litres capacity or one or more liners weighing in total less than 10 kg from empty containers, which contained acute hazardous waste chemical or severely toxic waste;

h) the residues or contaminated materials from the clean-up of a spill of a waste mentioned in clause (d) involving an amount of waste less than 5 kg;

i) the residues or contaminated materials from the clean-up of a spill of a waste mentioned in clause (e) involving an amount of waste less than 1 kg

xix) "inert fill" means uncontaminated earth or rock fill

xx) "inert liquid waste" means liquid waste that results from industrial processes or manufacturing operations and consists of water and suspended solids that can be shown to produce a

leachate containing any contaminants at a concentration not exceeding those in Schedule 5 (Appendix 4 to the Blueprint)

xxi) "landfilling" means the disposal of waste on land under controlled conditions and includes compaction of waste into a cell and covering the waste with cover material at regular intervals

xxii) "leachate sensitive waste" means a waste which produces leachate containing any of the contaminants listed in Schedule 5 (Appendix 4 to the Blueprint) at a concentration ten times greater than that specified in the Schedule using the "Leachate Extraction Procedures" or an equivalent test method approved by the Ministry (See Section 4 following the definitions.)

xxiii) "liquid industrial waste" means waste that results from industrial processes or manufacturing or commercial operations, and has a slump more than 150 mm when tested by the slump test method as prescribed in attachment to Appendix 7 of the Blueprint, but does not include:

a) waste from the operation of a sewage system subject to the provisions of Part VII of the Act or the operation of a holding tank to which regulations made under clause (a) or (b) of subsection 3 of section 136 of the Act apply;

b) waste from the operation of a sewage works subject to the Ontario Water Resources Act where the principal wastes entering the works are from human origin;

c) waste that is generated or removed for treatment, storage or disposal in an amount less than 25 litres per month by a generator;

d) waste directly discharged by its generator from the site where the waste is generated into municipal sanitary sewage works in accordance with applicable bylaws or into a sewage system, as defined in Part VII of the Act, that is operated in accordance with the Act;

e) "recyclable material";

f) waste that results directly from the processing or preparation of food;

g) "inert liquid waste";

h) drilled fluid and produced waters associated with the

exploration, development or production of crude oil or natural gas;

i) "processed organic waste";

j) wastes from operation of automobile service stations;

k) "asbestos waste"

xxiv) "municipal waste" means domestic waste, and non-hazardous solid industrial waste from commercial and industrial establishments and includes asbestos waste and municipal sewage sludge which has been stabilized

xxv) "open transfer station" ("waste depot") means a place where municipal waste is temporarily deposited on specially prepared surfaces such as concrete pads or in containers of adequate size and no processing or treatment is carried out prior to its removal to a waste disposal site or treatment facility

xxvi) "organic waste utilization" means incorporation of organic waste in the soil to improve its characteristics for crop or ground cover growth

xxvii) "on-site processing facility" means any facility that is located on any site and is used for the processing of waste produced on the same site. Note: It is proposed that a Certificate of Approval not be required for the establishment and operation of an incinerator for the treatment and disposal of pathological waste provided the facility is attached to an institution such as a hospital.

xxviii) "on-site road" means a road for the movement of vehicles and equipment within a waste disposal site or a waste processing facility

xxix) "on-site transfer station" means a place which is located on any site and is used solely for temporarily storing waste that is produced on the same site, prior to its removal to a waste disposal or processing facility

xxx) "processed organic waste" means waste that is predominantly

organic in composition which has been stabilized by digestion or other means and includes sewage residue from sewage works that are subject to the provisions of the Ontario Water Resources Act

xxxi) "receiver" means any person or corporation who, by virtue of ownership, management, control or operation is engaged in the receiving of waste

xxxii) "recyclable material" means waste

a) that is to be transported directly from a generator to a person

i) who will wholly utilize it in a commercial or industrial process used principally for functions other than waste management and which does not involve combustion of waste;

ii) who will wholly utilize it as a dust suppressant, or

iii) who will package or offer the waste for retail sale, or

b) that is to be transferred, bulked, processed, or otherwise treated in existing and on-going facilities for retail, commercial or industrial use, reuse, recycling or reclamation

but does not include hazardous waste, site-specific waste, and liquid industrial waste.

xxxiii) "scavenging" means the uncontrolled removal of re-usable material from waste at a waste disposal site or a waste processing facility

xxxiv) "site-specific waste" means

a) site-specific industrial waste or

b) leachate sensitive waste,

but does not include

a) hazardous waste

b) liquid industrial waste

c) waste from the operation of a sewage system subject to the provisions of Part VII of the Act or the operation of a holding tank to which the regulations made under clause (a) or (b) of sub-section 3, of section 136 of the Act apply

d) waste from the operation of a sewage works subject to the Ontario Water Resources Act where the principal component of the wastes entering the works is from human origin

e) domestic waste

f) waste produced, generated or otherwise accumulated by a generator in a given month in an amount that is less than 5 kilograms

g) an empty container or the liner from an empty container that contained site-specific waste or

h) the residue or contaminated materials from the clean-up of a spill of less than 5 kilograms of a waste

xxxv) "site-specific industrial waste" means a solid waste listed in Schedule 4 (Appendix 4 to the Blueprint) unless a declaration is made pursuant to Section 5 (following the definitions) that the waste is not a site-specific industrial waste. (See Section 4 following the definitions.)

xxxvi) "waste derived fuel" means waste that is to be transported directly to a person who will wholly utilize it in a commercial or industrial process used principally for functions other than waste management and which does involve combustion of the waste as a fuel supplement

xxxvii) "waste processing facility" means any facility at which waste is treated or incinerated or otherwise prepared for subsequent recycle, treatment or disposal

Section 4 and Section 5 which follow are provided here for ease of reference. They are adapted slightly from Sections 4 and 5 of Appendix 4 to the Blueprint and appear on pages 12, 13 and 14 of that document.

**Section 4 - Co-Disposal at Landfills:** Certain types of industrial waste could be co-disposed with municipal waste at a suitable landfill dependent upon satisfactory leachate testing of the wastes. Site-specific industrial waste and leachate sensitive waste are acceptable for disposal at a landfilling site and may be dealt with as if they were non-hazardous solid industrial waste provided:

a) that a Certificate of Approval issued for the landfilling site does not exclude the disposal of the waste by name, class or characteristic;

b) that the following information is provided to the Regional Director, ninety days prior to the date the waste is intended to be received at the site:

i) a list of all classes of waste and their estimated volumes including all site-specific wastes that are being received or that are intended to be received at the waste disposal site;

ii) the results of the leachate analyses for each site-specific waste;

iii) a report prepared by a hydrogeologist, demonstrating that the contaminant attenuating capacity of the soils at the site is greater than that required to reduce the concentration, at the boundary of the landfill property, of those contaminants listed in Schedule 5 (Appendix 4 to the Blueprint) to twenty-five percent of the difference between background concentration and Ontario Drinking Water Quality Criteria; and

iv) such other information as the Regional Director may require.

**Section 5 - Hazardous Waste Listing Committee:** A committee of experts

would be established to provide ongoing advice on the appropriate placement of wastes in the various scehdules. (See Appendix 4 to the Blueprint.) The committee would also be empowered by the following section to deal with requests from individual generators of waste and issue a declaration, in appropriate circumstances, that special factors are involved and the waste of the individual generator shall be deemed not to fall within a general waste description in Schedule 1 or 2.

a) The generator of a hazardous industrial waste, acute hazardous waste chemical, hazardous waste chemical or a site-specific industrial waste may apply to the Hazardous Waste Listing Committee for a declaration that the specific waste is not a hazardous industrial waste, acute hazardous waste chemical, hazardous waste chemical, or a site-specific industrial waste, as the case may be.

b) The Hazardous Waste Listing Committee may make a declaration referred to in subsection (a) if it is satisfied on reasonable grounds that, as a result of factors specific to the facilities or operations of the generator, the waste in question differs from comparable waste which is a hazardous industrial waste, acute hazardous waste chemical, a hazardous waste chemical, or a site-specific industrial waste as the case may be, and exhibits hazardous properties to an extent less than the criteria for inclusion of such comparable waste as a hazardous industrial waste, acute hazardous waste chemical, a hazardous waste chemical, or a site-specific industrial waste as the case may be.

c) The applicant for a declaration shall submit detailed written material in support of the application.

d) The applicant may request an opportunity to present his argument to the Committee orally.

e) The Committee may, at any time, request additional information from the applicant.

f) The Committee may grant the declaration sought or may give

reasons and refuse to grant the declaration sought, if information requested under subsection (e) has not been promptly provided or if it is not satisfied that a reasonable case has been made in accordance with subsection (b).

g) The decision of the Committee is final.

h) The generator of a waste who has been refused a declaration by the Committee, may not apply again to the Committee in respect of the same waste within two years after the date of the refusal without the permission of the Committee.

## DESIGNATED WASTES

This section lists those materials which may be designated as waste to provide the control which will be necessary if certain aspects of the Blueprint are adopted. The reader will note that certain materials are listed as waste but then exempted from this Regulation because they are either controlled by other statutes or require no control. Together with the previous section on definitions, this sets the stage for those sections of the Regulation which deal with standards.

### Proposed Designated Waste

The following are designated wastes:

i) Agricultural waste.

ii) Asbestos waste.

iii) Backfilling waste.

iv) Commercial waste.

v) Condemned animals and parts thereof at a plant licensed under the Meat Inspection Act (Ontario) or an establishment operating under the Meat Inspection Act (Canada).

vi) Dead animals.

vii) Derelict motor vehicles.

viii) Domestic waste.

ix) Hauled sewage.

x) Hazardous waste.

xi) Inert fill.

xii) Inert liquid waste.

xiii) Liquid industrial waste.

xiv) Municipal waste.

xv) Processed organic waste.

xvi) Recyclable material.

xvii) Site-specific waste.

xviii) Mill tailings from a mine.

xix) Waste derived fuel.

The following wastes are exempted from Part V of the Act and this Regulation.

i) Agricultural wastes.

ii) Condemned animals or parts thereof at a plant licensed under the Meat Inspection Act (Ontario) or at an establishment operating under the Meat Inspection Act (Canada).

iii) Dead animals to which the Dead Animal Disposal Act applies.

iv) Hauled sewage.

v) Inert fill.

vi) Mill tailings from a mine.

vii) Recyclable material.

## WASTE RECEIVING FACILITIES

This section lists those sites or facilities which may be designated as waste receiving facilities for the purposes of providing control over waste management practices, if certain aspects of the Blueprint are adopted. As before, certain of these may then be exempted if they are dealt with in other ways.

**Proposed List of Waste Receiving Facilites**

i) Backfilling site.

ii) Derelict motor vehicle site.

iii) Enclosed transfer station (transfer station).

iv) Landfilling site.

v) Organic waste utilization site.

vi) On-site processing facility.

vii) On-site transfer station.

viii) Open transfer station (waste depot)

ix) Processing facility.

x) Waste derived fuel site.

The following waste disposal sites are exempted from Part V of the Act:

i) Derelict motor vehicle site.

ii) On-site processing facility (for municipal waste only).

iii) On-site transfer station (for municipal waste only).

iv) Waste derived fuel site.

## STANDARDS FOR SITING LANDFILLS

This section proposes standards for the siting of landfill sites. These standards would be applicable to applicants for Certificates of Approval for new sites. The reader should note that extensive guidelines or criteria would be developed, following the Blueprint process, to implement this part of the Regulation. This section, and the next which deals with operating standards, provide for the effective control of landfilling in Ontario.

**Proposed Standards**

i) The location of the facility shall be selected so as to reduce the effects of nuisance such as dust, noise, traffic, litter, odour and other forms of environmental pollution.

ii) The site shall be located a reasonable distance from cemeteries, airports and residences.

iii) Access roads and on-site roads shall be provided so that vehicles hauling waste to and on the site may travel readily under all normal weather conditions.

iv) Adequate and proper equipment shall be provided for the compaction of waste into cells and the covering of the cells with cover material unless otherwise specified on the Certificate of Approval.

v) Where required, a site operation and development plan shall be provided detailing the operational mode, procedures for closure and final use of the site including safeguards for the prevention of accidents, fires and vector control at the site.

vi) Where accurate determination of input of all waste or other material entering this facility is required weigh scales shall be provided and appropriate records kept.

vii) An adequate buffer area and a green belt shall be provided at the site, surrounding the landfill area, for the purposes of

a) attenuating contaminants, b) implementing corrective measures if required, c) screening the site from public view, and d) reducing the effect of other environmental impacts.

viii) Fencing or other means necessary shall be provided around the landfill site to prevent entry by unauthorized persons and animals. Access to the property shall be controlled by a lockable gate.

## STANDARDS FOR OPERATING LANDFILLS

This section proposes standards for the operational control of landfill sites. These standards would apply both during the active life of the site and closure operations. Extensive guidelines and procedures would have to be developed.

**Proposed Standards**

i) Signs shall be posted at prominent locations indicating hours of operation and the types of wastes accepted. Other signs shall be posted as necessary to ensure environmentally acceptable operations.

ii) Access to the site shall be restricted to persons authorized to use the site to deposit waste in the fill area or to conduct inspections, monitoring and supervision.

iii) Waste disposal operations at the site shall be adequately supervised.

iv) Surface drainage passing over or through the site shall not adversely affect adjoining property.

v) Waste shall be deposited in accordance with accepted practices.

vi) Where necessary, measures shall be taken to isolate landfilling sites and effectively control the egress of contaminants by the construction and operation of structures such as dykes, leachate collection systems, gas venting trenches and linings.

vii) Where required, monitoring shall be provided by the owner or the operator, to measure the extent of egress of contaminants and if necessary measures shall be provided for the containment, collection, treatment and disposal of contaminants to prevent pollution.

viii) Where necessary, contingency plans and contingency measures,

shall be provided by the owner or operator of the site to control the egress of contaminants.

ix) Air emissions shall meet the requirements of Regulation 308 under the Act.

x) Procedures shall be established for the adequate control of rodents and other animals, birds and insects at the site.

xi) No burning shall take place at a site except as provided for in the Certificate of Approval.

xii) Whenever any part of a fill area has reached its limit, the final cover of cover material shall be placed on the completed fill and such cover shall be inspected at regular intervals and when necessary, action will be taken to maintain the integrity and continuity of the cover material.

xiii) Scavenging shall not be permitted.

## STANDARDS FOR SITING WASTE PROCESSING FACILITIES

This section proposes standards for the siting of waste processing facilities, for example facilities for incineration, composting, baling, shredding, solidification, de-watering and bulking. These standards will be applicable to those applying for Certificates of Approval. This section and the next which deals with operating standards, provides for the effective control of waste processing facilities in Ontario. Extensive guidelines will be developed for these sections after the Blueprint process.

**Proposed Standards**

i) The location of the facility shall be selected so as to minimize the effects of nuisance such as dust, noise, traffic, litter, and odour.

ii) Access roads and on-site roads shall be provided so that vehicles hauling waste may travel readily under all normal weather conditions.

iii) On-site fire protection shall be provided and additional arrangements shall be made with the fire department or the municipality for fire fighting services.

iv) Sufficient area within the property boundary shall be provided for vehicle turning.

v) Adequate equipment and instrumentation shall be provided for the operation of the facility.

vi) Where required for accurate determination of the input of all waste or other material entering the facility, weigh scales shall be provided and appropriate records kept for inspection upon demand.

vii) Wastewater from these facilities shall be subject to the requirements of the Ontario Water Resources Act or be acceptable to the local municipal authorities for disposal in

sanitary sewerage systems.

viii) An enclosed unloading area of an adequate size shall be provided.

ix) Residual waste shall be disposed of at an approved landfill site or other facility.

## STANDARDS FOR OPERATING WASTE PROCESSING FACILITIES

This section proposes standards for the operational control of waste processing facilities.

**Proposed Standards**

i) Signs indicating the hours of operation, the types of waste accepted, and instructions for the users of the facility shall be prominently posted.

ii) Air emissions shall meet the requirements of Regulation 308 under the Act.

iii) Where required, a monitoring program shall be provided by the owner or operator to measure the extent of egress of contaminants, and if necesary, measures shall be provided for the containment, collection, treatment and disposal of contaminants to prevent pollution.

iv) Scavenging shall not be permitted.

## STANDARDS FOR SITING TRANSFER STATIONS

This section proposes standards for the control of siting of transfer stations. It is divided into two sub-sections: the first deals with open transfer stations (waste depots); the second deals with enclosed transfer stations (transfer stations).

This section and the next which deals with operating standards, provides for the effective control of transfer stations in Ontario. Extensive guidelines would be developed in conjunction with these Regulations.

**Proposed Standards**

a) Open transfer stations (waste depots)

i) The location of a transfer station (waste depot) shall be selected so as to minimize the effects of dust, noise, odour, traffic and litter.

ii) Access shall be appropriately controlled.

iii) Access roads and on-site roads shall be provided so that vehicles hauling waste to and on the site may travel readily under all normal weather conditions.

iv) Sufficient area within the property boundary shall be provided for vehicle turning.

b) Enclosed transfer stations (transfer stations)

i) The location of the enclosed transfer station (transfer station) shall be selected so as to minimize the effects of nuisance such as dust, noise, traffic, odour and litter and shall not impair the use of the adjacent property or endanger the health and safety of any person who may use such property.

ii) Facilities shall be enclosed to prevent access by unauthorized persons.

iii) Sufficient area within the property boundary shall be provided for vehicle turning.

iv) Adequate equipment, including necessary instrumentation, shall be provided for transferring waste and for the operation of the facility.

v) Where required for adequate determination of input of waste or other material entering the facility, weigh scales shall be provided at the site and appropriate records kept.

vi) An adequate unloading and storage area shall be provided for the handling of waste. Sufficient area must be provided for vehicles when waiting.

## STANDARDS FOR OPERATING TRANSFER STATIONS

This section proposes standards for the operational control of transfer stations. The first sub-section deals with open transfer stations while the second deals with enclosed transfer stations.

**Proposed Standards**

a) Open transfer stations (waste depots)

i) Signs indicating the hours of operation, and instructions for the users of the facility shall be prominently posted.

ii) Transfer of waste from the incoming vehicles to the transfer station and to another vehicle shall be carried out in a safe and environmentally acceptable manner.

iii) Where required, a monitoring program shall be provided by the owner or operator to measure the extent of egress of contaminants and if necessary measures shall be taken for the containment, collection, treatment and disposal of contaminants.

iv) Adequate emergency control measures shall be made available and such procedures shall be prominently posted.

v) No wastes, other than those specified in the Certificate of Approval shall be accepted.

vi) Scavenging shall not be permitted.

b) Enclosed transfer stations (transfer stations)

i) Signs shall be posted indicating the hours of operation, the types of waste accepted, restrictions on the use of facility and safeguards for the prevention of accidents.

ii) The facility shall be adequately supervised when open to the users.

iii) Air emissions shall meet the requirements of Regulation 308 under the Environmental Protection Act.

iv) Where required a monitoring program shall be provided by the owner or operator to measure the extent of egress of contaminants and if necessary measures shall be taken for the prevention of pollution.

v) No wastes other than those specified in the Certificate of Approval shall be accepted.

vi) Scavenging shall not be permitted.

## STANDARDS FOR LOCATION AND OPERATION OF ORGANIC WASTE UTILIZATION SITES

This section proposes standards for both the siting and operation of organic waste utilization sites on which organic wastes are spread. The reader should note that the existing guideline, "Guidelines for Sewage Sludge Utilization on Agricultural Land" is currently being revised by the Ministries of Environment and Agriculture & Food. Additional guidelines/criteria may be developed if warranted.

**Proposed Standards**

i) The site shall be located and operated so that it is at an adequate distance:
   a) from any watercourse, (as determined by land slope), to prevent direct surface drainage to a watercourse,
   b) from any building or residence, to prevent any material harm or discomfort to occupants,
   c) above the ground water table to prevent impairment of ground water quality for anticipated ground water usages, and
   d) from water wells, to maintain the quality of potable water.

ii) Organic waste shall not be spread during any period in which conditions are such that surface runoff is likely to occur, taking into account land slope, soil permeability and climatic conditions.

iii) Crops shall be grown and waiting periods between spreading and harvesting shall be observed so that waste usage creates no risk to crop growth or utilization.

iv) Organic waste shall be spread as uniformly as possible.

## STANDARDS FOR WASTE CARRIERS

At the present time, only general standards for carriers are proposed in Regulation 309. Detailed requirements have been covered in the past on a case by case basis during the review conducted as part of the approvals process.

The following section suggests standards which include requirements for driver training, vehicle maintenance, vehicle security and waste documentation.

Specific vehicle design standards are currently being developed by the Federal Government under the Transportation of Dangerous Goods Act. These standards will be reviewed and possibly adopted when they have been finalized.

It is proposed that carriers of municipal waste will not require certification.

**Proposed Standards**

i) All tankage and other waste containers that are used for the transportation of waste must be maintained in a good state of repair so as to ensure that there is no waste leakage or emissions of odours, dust or other contaminants to the environment.

ii) All vehicles used for the transportation of liquid industrial waste, hazardous waste and site-specific waste shall carry, at all times, a copy of the Certificate of Approval issued to the company operating the vehicle pursuant to Section 27 of the Act.

iii) All operators of vehicles used for the transportation of liquid industrial waste, hazardous waste, and site-specific waste shall be trained in the following:

a) operation of the vehicle and waste management equipment;

b) relevant waste management legislation, regulations and

guidelines;

c) major environmental concerns pertaining to the waste to be handled;

d) occupational health and safety concerns pertaining to the waste to be handled; and

e) emergency management procedures for the wastes to be handled.

iv) Vehicles involved in the transportation of liquid industrial waste, hazardous waste and site-specific waste shall be constructed, operated and placarded in accordance with the standards and other requirements set out in the Ontario Dangerous Goods Transportation Act.

v) An operator must be in attendance at all times when liquid industrial waste, hazardous waste and site-specific waste is being loaded or unloaded from waste transportation vehicles.

vi) Valves that are part of a waste transportation vehicle used for liquid industrial waste and hazardous waste, shall have a locking mechanism and shall be locked when an operator is not in attendance, unless the vehicle is in an approved secure facility.

vii) The name of the company approved as a waste carrier for liquid industrial waste, hazardous waste or site-specific waste and the Certificate of Approval number, must appear in contrasting colours on the waste transportation vehicle operated by the company.

viii) Operators of vehicles approved for the transportation of hazardous waste, liquid industrial waste and site-specific waste shall obtain a letter of credit in the amount of $50,000.00, payable to the Ministry, in the event of waste abandonment or illegal practices under the Act. The letter of credit will require that the Ministry be informed 90 days prior to cancellation.

ix) All vehicles must carry the emergency management procedure supplied by the waste generator for the particular hazardous waste, liquid industrial waste or site-specific waste being transported.

## MANAGEMENT OF ASBESTOS WASTE

The following management requirements for asbestos waste are provided by Ontario Regulation 175/83, which was made on April 16, 1983 as an amendment to Regulation 309. The section sets out specific collection, transportation and handling requirements to deal with asbestos waste.

The Ministry intends to further review the proper management and disposal of asbestos waste within the context of the Blueprint. This will be augmented by the material and recommendations in the report of "The Royal Commission on Matters of Health and Safety Arising from the Use of Asbestos in Ontario". The Commission has completed its hearing phase and expects to publish its report this summer.

### Amendment to Regulation 309 Pertaining to Management of Asbestos Waste

1. No person shall cause or permit asbestos waste to leave the location at which it is generated except for the purpose of transporting it to a waste disposal site, the operator of which has agreed to accept it and has been advised as to its anticipated time of arrival and,
   i) the asbestos waste is in a rigid, impermeable, sealed container of sufficient strength to accommodate the weight and nature of the waste, or
   ii) where the asbestos waste is being transported in bulk, it is transported by means of a waste management system operating under a Certificate of Approval that specifically authorizes the transportation of asbestos waste in bulk.

2. Where a container referred to in subparagraph i of paragraph 1 is a cardboard box, the waste must be sealed in a six-mil polyethylene bag placed within the box.

3. Every container referred to in subparagraph i of paragraph 1 must be free from punctures, tears or leaks.

4. The external surfaces of every container referred to in

subparagraph i of paragraph 1 and of every vehicle or vessel used for the transport of asbestos waste must be free from asbestos waste.

5. Both sides of every vehicle used for the transportation of asbestos waste and every container referred to in subparagraph i of paragraph 1 must display thereon in large, easily legible letters that contrast in colour with the background the word "CAUTION" in letters not less than ten centimetres in height and the words:
CONTAINS ASBESTOS FIBRES
Avoid Creating Dust and Spillage
Asbestos May Be Harmful To Your Health
Wear Approved Protective Equipment

6. Asbestos waste being transported from the location at which it is generated,
   i) shall be transported,
      a. by a driver trained in the management of asbestos waste,
      b. as directly as may be practicable, to the waste disposal site at which disposal of the asbestos waste is intended to take place,
   ii) shall not be transferred to a transfer station or other waste disposal site where disposal of the asbestos waste will not take place, but it may be transported to a waste disposal site operating under a Certificate of Approval or provisional Certificate of Approval that specifically authorizes acceptance and processing of asbestos waste.
   iii) shall not be transported with any other cargo in the same vehicle,
   iv) shall not be transported in a compaction type waste haulage vehicle,
   v) where it is being transported in cardboard boxes, shall be in an enclosed vehicle,
   vi) shall be properly secured and covered with a suitable tarpaulin or net if it is transported in a vehicle that is not enclosed, and
   vii) shall be transported only in vehicles equipped with

emergency spill clean-up equipment including a shovel, a broom, wetting agent, protective clothing, a supply of six-mil polyethylene bags, bag closures and personal respiratory equipment.

7. During the transportation or unloading thereof, any asbestos waste that is loose or in a container that is punctured, broken or leaking shall be packaged, immediately on discovery, in a six-mil polyethylene bag.

8 Where containers of asbestos waste are being unloaded, the unloading shall be carried out so that no loose asbestos or punctured, broken or leaking containers of asbestos waste are landfilled.

9. Asbestos waste may be deposited only at locations in a landfilling site that have been adapted for the purpose of receiving asbestos waste or are otherwise suitable for that purpose.

10. Asbestos waste may be deposited at a landfilling site only while the depositing is being supervised by the operator of the site or a person designated by him for the purpose and the person supervising is not also operating machinery or the truck involved.

11. Where asbestos waste is deposited as set out in paragraph 9, at least 125 centimetres of garbage or cover material must be placed forthwith over the deposited asbestos waste in such a manner that direct contact with compaction equipment or other equipment operating on the site is avoided.

12. Every person handling asbestos waste or containers of asbestos waste, supervising the unloading of asbestos waste in bulk or cleaning asbestos waste residues from containers, vehicles or equipment shall wear protective clothing and personal respiratory equipment while so doing.

13. Protective clothing that has been or is suspected of having been in contact with asbestos waste shall be changed at the site of the exposure and either properly disposed of as asbestos waste or

washed at the end of the working day.

14. Disposable protective clothing shall not be reused.

15. Every person directly or indirectly involved in the transportation, handling or management of asbestos waste shall take all precautions necessary to prevent asbestos waste from becoming airborne.

## Schedule of Appendices

1. Waste Management Consultation Session Report
2. Waste Reduction, Reuse, Recycling and Recovery Report
3. Perpetual Care Program Report
4. Interim Guideline for the Interpretation of the Hazardous Waste Definition (Regulation 309)
5. Legislative Implications of the Blueprint for Waste Management
6. Proposed Revisions to Regulation 309
7. Proposed Revisions to Regulation 313
8. Proposed Generator Regulation
9. Terms of Reference for a Waste Management Master Plan
10. Solid Waste Management Cost Accounting Summary Report
11. Proposed Regulation Under the Environmental Assessment Act Regarding Private Waste Disposal Sites